

Leaving a Cardiology Service Against Medical Advice—A Follow-Up Study

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Noncompliant patient behavior is being increasingly recognized as a significant health care problem. A patient's degree of compliance appears to be influenced by a variety of factors.¹ Noncompliance involves many kinds of behavior including dropout from treatment. One form of dropout from treatment, premature departure from the hospital, is an especially dramatic disruption of health care.

Investigators have attempted to characterize the demographic and behavioral features of the patients and the clinical context of these events. For a cardiac patient, despite shortening stays in coronary care units, physicians presume that adverse outcome awaits the patient who leaves prematurely. The consequences, however, are unclear; there has been almost no follow-up study of this problem.

We recently reported on a case-control study of 32 patients who left a cardiology service against medical advice (AMA).² The groups were found to show significant differences on demographic, medical and behavioral variables. The AMA group experienced significantly fewer in-hospital cardiac complications such as heart failure and less severe chronic disability (New York Heart Association [NYHA] classification). The two groups, however, did not show significant differences regarding age, sex or discharge diagnosis.

For the follow-up study, we used the San Francisco General Hospital Medical Center records for both groups from the year after the index hospital admission. The groups are described in terms of age, sex, discharge diagnosis and NYHA classification at the time of the index hospital admission. Follow-up data include the number of patients and the total number of cardiac readmissions, the total of hospital days, number of AMA discharges and deaths. Between-group differences were analyzed by the Student's *t* test or by χ^2 analysis.

Data were available on 20 patients in each group. A review of the data shows no significant differences in the variables tested (Table 1). As in the original investigation, age and sex did not distinguish the groups. The subset of the original AMA group described here is skewed toward the most disabled (mean score, NYHA classification, 2.3) of the original group (mean score, NYHA classification, 1.4). The subset of the controls has a score that closely approximates that of the original control group (mean score, NYHA classification, 2.0).

(Ochitill HN, Byrd RC, Greene J: Leaving a cardiology service against medical advice—A follow-up study. *West J Med* 1987 Jun; 146:765)

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ABBREVIATIONS USED IN TEXT

AMA = against medical advice
NYHA = New York Heart Association

TABLE 1.—Comparison of Base-line and Follow-up Data

Characteristics	AMA*	Controls	P Value
Patients, number	20	20	
Sex, male, number	16	13	NS
Age, yr	60 ± 14	61 ± 17	NS
Discharge diagnoses, number			
Myocardial infarction	3	4	
Unstable angina	2	2	
Atypical chest pain	3	4	
Congestive failure	4	5	
Supraventricular arrhythmia	3	1	
Syncope	1	2	
Other	4	2	
NYHA classification (± SD)	2.3 ± 0.08	2.1 ± 0.8	NS
Follow-up			
Patients readmitted, number	9	11	NS
Readmissions, number	19	20	NS
Hospital time, days	175	155	NS
AMA discharges, number	4	2	
Deaths	0	1	

NS = no significance, NYHA = New York Heart Association, SD = standard deviation

*Left hospital against medical advice.

The variables related to hospital use showed no significant difference between the groups, while there was a slightly greater number of discharges against medical advice in the AMA group. One patient in the control group died during the follow-up period.

Our data suggest that the premature departure of the AMA patients has not had a major adverse effect on the course of their cardiac illness. In some instances, an AMA slip is signed as a formality, though the staff anticipates minimal clinical risk.

Baile and co-workers obtained follow-up data on 22 of 29 patients an average of nine months after they signed out of a coronary care unit against medical advice.³ Two patients were readmitted with symptoms of myocardial ischemia and two others died, neither a confirmed cardiac death.

Though lack of follow-up for 12 patients in each group raises doubts about the representativeness of the outcome, the descriptive data suggest that the subset of the AMA group is the most chronically disabled among the AMA patients and as disabled as the subset of control patients.

This study indicates that many of the patients leaving prematurely do so without deleterious consequences. The leave-taking should be free of recrimination and should be a time to optimize the chances for follow-up. Further work on the outcome of various health behaviors should be pursued.

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